- 11. Camptosorus rhizophyllus, Link.
- 12. Phegopteris polypodivides, Fee. 13. Phegopteris hexagonoptera, Fee.
- 14. Aspidium Thelypteris, Swartz.
- 15. Aspidium Noveboracense, Swartz.
- 16. Aspidium intermedium, Willd.
- 27. Botrychium Virginicum, Swartz.
- 28. Lycopodium alopecuroides, L.
- 29. Lycopodium dendroideum, M.
- 30. Lycopodium complanatum, L.
- 31. Selaginella rupestris, Spring. 32. Selaginella apus, Spring.

The rocks are very abrupt and steep along the river near the "Springs" and it was with great difficulty that some of the specimens were obtained. Asplénium pinnatifidum. Nutt., was formerly quite abundant on the cliffs on the Schuylkill near Philadelphia. but of late years very little has been seen there. The specimens from Rock Castle have fronds very much larger, some of them measuring eight inches in length, having a very long and slender prolongation and fertile nearly to the tip. The Trichomanes radicans. Swartz? was collected only after a long and laborious search far up among the rocks where the dripping water kept it constantly wet. The specimens were very large and in good condition. This is one of the rarities of that section, and I believe is about its most northern range.

Asplenium Bradleyi, D. C. Eaton., a new species, had been said to grow in the vicinity, and Asplenium ebenoides, R. R. Scott., the so called hybrid fern, having been collected a little farther south was also looked for, but Miss Rule did not succeed in finding either of them.

Camptosorus rhizophyllus, Link., was of very luxuriant growth, frequently two or three, and on one occasion I am informed four generations were linked together.

ISAAC C. MARTINDALE, Camden, N. J.

MISCELLANEOUS NOTES.—In regard to Dr. Douglas' note in the October Bultetin I wish to say a word. Erechthites hieracifolia, Raf., grew abundantly three years ago last August at Whitewater, Wisconsin, and under such surroundings that I am not willing to believe I noticed it on its first appearance in the place. Lobelia syphilitica, L., is often white in Wisconsin. I found a station on Skinner Creek, Green Co., Wis., from which I gathered white specimens for several years and have not the least doubt but they can be had there to-day.—HERBERT E. COPELAND.

find on looking over some specimens in my hebarium a peculiar form of Elephantopus Carolinianus, Willd. The peculiarity consists in the leaves being opposite instead of alternate. Near the base of the specimen the leaves are in whorls of three, but when they advance further up the stem they are very clearly opposite. I examined the specimen somewhat critically in order to see if other variations did not occur, but could find none unless it was the absence of the characteristic "somewhat hairy." I did indeed find some hairs, yet hardly enough to be noticed in describing the plant.

Among our cultivated plants we have very commonly Euphorbia marginata Pursh. About two years ago it began to escape and now on the north bank of the Eel river it covers a low bluff for nearly a mile. I have not seen it recorded as having become naturalized as far north as this before, nor did I see it, except as cultivated, until in 1874. From my knowledge of its hardiness and rapidity of growth, I presume we may certainly count it as a permanent resident .- M. S. C.

A few weeks ago I found near Loveland, Ohio, a peculiar form of Ragweed (Ambrosia actemisiorfolia). Gray, in the description of the genus says; "Sterile and fertile flowers occupying different heads on the same plant; the fertile 1-3 together and sessile in the axils of leaves or bracts, at the base of the raceines or spikes of sterile heads." In the specimens I found there were no sterile flowers to be seen, and instead of the fertile flowers being in the axils of the leaves, they were arranged in upright spikes as the sterile usually are. There were some half dozen plants in a space about 50 yards' square in one locality, and in another place one and the largest specimen, less than three feet high. A year or so ago my brother found a specimen of the same kind, but he does not know where. Is this a common thing to find or not?

I notice in the October Bulletin that a correspondent found a white Lobelia syphilitica. About a month ago I found one about two miles from our house. It was growing within two inches of a plant with the flowers blue and was the only one seen, although the blue ones were plenty enough. A week after, in a damp place in an open wood, I found two specimens growing close together with pinkish flowers.

A couple of years ago we found in the east end of Cincinnati, along side of a rail-road track, numbers of the *Euphorbia marginuta*, seemingly perfectly naturalized. This is recorded as a native of Nebraska, but has made its way east and established itself. Last year it was abundant and this year also.—JOSEPH F. JAMES, Cincinnati.

I would like to send a few notes on some variations in plants, noticed at different times, and in different places. In 1872-3-4, I very frequently found Polygonum amphibium with salver form stipules. The var. terrestre especially showed this feature. Sometimes I found it growing on high, dry, sandy soil, quite hairy with rust colored pubescence. I also found P. Careyi with salver form stipules. I wrote to Prof. Gray, but could not learn that he had ever seen this feature. The past season I found the same variation in the var, terrestre of P. amphibium, around Bloomfield, Conn. I also found P. arifolium in several localities with salver form stipules. From this it would seem as if the whole of this genus might, under certain circumstances, present this singular feature. One form of Polygonum, very frequent in southern Iowa I have never seen noticed, though it may have been. When young, the leaves had the color and the woolly pubescence of a Gnaphalium, but when old the leaves more resemble those of Aster sericeus in their silky appearance. Often there were dark triangular patches on the young leaves. The plant was from four to five feet high, but I never was fortunate enough to find it in bloom except once, and the blossom was somewhat like P. amphibium. It generally grew on rather low ground.

Perhaps the white *Eupatorium fistulosum* is not so rare as some other forms, but I have found several specimens the past season. Also the *Eupatorium purpureum* with opposite leaves, in several localities. Last year I found *E. perfoliatum* with leaves in threes, and also with purple flowers. This year I have found a great many specimens with purple flowers, and in these cases the stem was often purple.

I have several times noticed the feature, referred to by one of your correspondents, in Verbaseum Thapsus, and also in Lappa major. The "wavy" apearance in the leaves of young plants of the mullein is very common. I found a very remarkable Hieracium last fall: It was a young plant, growing in a cleft of a trap rock. The older leaves were thin and veiny, not much unlike those of H. renosum, L., but more hairy and nearly oval, but the younger ones were like the young leaves of Verbaseum Thapsus, except they tapered into a short petiole. There seemed to be a regular gradation in the transition. Can any one give a little light on the subject of these variations?—N. Coleman, Bloomfield, Conn.

I find the seed vessels of *Staphylea trifolia* three, four and five-celled in the same cluster and upon the same tree. Gray and Wood give the seed vessels *three*-celled without exception, but upon quite a large tree for the *Staphylea* I find them usually four-celled. Has any one else noticed the same?

Is it usual for the bid of *Trillium cernium* to be *erect* till nearly the time of flowering? I have found several erect at first, afterward the bid quite inclined, then the flower hanging under the leaves.—C. C. H., *Poughkeepsie*, N. V.

POLYMNIA CANADENSIS, I.., VAR. DISCOIDEA.—This is only the lafe-flowering state of the species, judging from a plant in my garden, which bore the ordinary flowers with rays early in the season, but in September branched extensively and produced an abundance of discoid heads.—P., Oquanka Ill.